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(54) Installation of roofing panels

Montieren von Dachplatten

Installation de panneaux de toiture

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Description

[0001] This invention concerns installation of roofing panels.

[0002] Conservatories and like structures can have a roof structure comprising parallel glazing bars extending from one or both sides of a ridge member with glazing panels supported between the glazing bars. A common glazing material is polycarbonate sheeting, which may have two or three skins joined at their edges and intermediate their edges to form longitudinal ducts through the panels. When such panels are fitted to a conservatory roof, the ends of the panels are sealed with a breather tape to prevent ingress of water into the ducts of the panels. The ends of the panels are then covered with a simple polycarbonate cap however, polycarbonate panels are generally not as flat as glass panes, so that some ingress of water is still possible between the polycarbonate panels and their end caps, which eventually finds its way into the polycarbonate panels themselves.

[0003] EP-A-0513934 discloses an end cap for a glazing panel comprising a channel section with an upper side having co-extruded gasket material along a free edge of the upper side and extending inwardly of the channel, so as to lie on the glazing panel surface.

[0004] DE-U-8601745 discloses channel section end caps for glazing panels.

[0005] An object of this invention is to provide a means for preventing the foresaid ingress of water into glazing panels of the ducted type.

[0006] According to the invention, there is provided an end cap for ducted plastic panels (11), which comprises a channel section member having an intended upper side (12) and an intended lower side (16), the upper side having a co-extruded gasket (20), whereby, when the end cap is pushed onto a plastics panel, the gasket lies on the panel surface to limit passage of water past the gasket, characterized in that the upper and lower sides of the channel section member converge over at least part of their length and the co-extruded gasket extends forwardly from a free edge of the upper side of the channel section member.

[0007] Preferably the lower side has its free edge curving away from the upper side over a part of its height. The lower side preferably includes weep holes spaced along its length preferably adjacent to the base of the channel member. Within the channel member, there are preferably provided one or more projections to act as stops for a panel onto which the end cap is fitted. The projection or projections preferably extend downwardly from the upper side of the wall of the channel member, preferably at right angles thereto.

[0008] This invention will now be further described, by way of example only, with reference to the accompanying drawings, in which:

Figure 1 is section through an end cap according to a first embodiment of the invention; and

Figure 2 shows the end cap of Figure 1 fitted to a ducted plastics panel.

[0009] Referring to Figures 1 and 2 of the accompanying drawings, an end cap 10 for a polycarbonate glazing panel 13 comprises a channel section member having an upper side wall 12, a base 14 and a lower side wall 16. the upper and lower side walls converge slightly away from the base over a major height of the lower side wall whereafter the lower side wall curves away from the upper side wall at 18.

[0010] The upper side wall has along its free edge a co-extruded gasket of rubber or synthetic elastomeric material 20. The gasket narrows towards its free edge and is angled downwards slightly relative to the upper side wall 12. Near its junction with the base, the upper side wall has an internal rib 22, which acts as a stop for the polycarbonate panel 11 pushed into the end cap.

[0011] The lower side wall has near its junction with the base a series of spaced weep holes 24 along its length, whereby any moisture entering the end cap can escape under gravity.

[0012] The base of the end cap is shown continuing below the lower side wall to provide a foot 26.

[0013] In use, the end cap 10 is pushed onto the end of the polycarbonate glazing panel 11. The curving of the lower side wall facilitates the insertion of the glazing panel past the gasket. The end cap is pushed on to the glazing panel until the glazing panel contacts the rib 22. In the fitted position, the gasket 20 lies on the top surface of the glazing panel to prevent passage of water into the end cap. The glazing panel shown is one that does not have a flat top surface but has arcuate sections over each duct. The gasket, therefore, follows the contours of the top surface of the panel.

Claims

1. An end cap (10) for ducted plastics panels (11), which comprises a channel section member having an intended upper side (12) and an intended lower side (16), the upper side having a co-extruded gasket (20), whereby, when the end cap is pushed onto a plastics panel, the gasket lies on the panel surface to limit passage of water past the gasket, characterized in that the upper and lower sides of the channel section member converge over at least part of their length and the co-extruded gasket extends forwardly from a free edge of the upper side of the channel section member.

2. An end cap as claimed in claim 1 characterized in that the lower side of the channel section member has its free edge (18) curving away from the upper side over a part of its height.

3. An end cap as claimed in claim 1 or 2, characterized

in that the lower side includes weep holes (24) spaced along its length.

4. An end cap as claimed in claim 3, characterized in that the weep holes (24) are adjacent to base (14) of the channel member.

5. An end cap as claimed in any one of claims 1 to 4, characterized by having within the channel one or more projections (22) to act as stops for a panel onto which the end cap is fitted.

6. An end cap as claimed in claim 5, characterized in that the projections (22) extend downwardly from the upper side wall (12) of the channel member.

7. An end cap as claimed in claim 6, characterized in that the projections (22) extend at right angles to the upper side wall (12) of the channel member.

Patentansprüche

1. Eine Endenabdeckung (10) für Luftraum aufweisende Plastikpaneelen (11), aufweisend ein Kanalabschnittsglied mit einer vorgesehenen Oberseite (12) und einer vorgesehenen Unterseite (16), wobei die Oberseite eine co-extrudierte Abdichtung (20) aufweist, und, wenn die Endenabdeckung auf eine Platikpaneele gedrückt wird, die Abdichtung auf der Paneelenoberfläche liegt, um den Durchtritt von Wasser nach der Abdichtung zu begrenzen, dadurch gekennzeichnet, daß die Ober- und Unterseiten des Kanalabschnittsglieds über zumindest einen Teil ihrer Länge konvergieren und die co-extrudierte Abdichtung sich forwärtsgerichtet von einer freien Kante der Oberseite des Kanalabschnittsglieds ausdehnt.

2. Eine Endenabdeckung wie in Anspruch 1 beansprucht, dadurch gekennzeichnet, daß die Unterseite des Kanalabschnittsglieds ihre freie Kante (18) weggekrümmt von der Oberseite über einen Teil deren Höhe aufweist.

3. Eine Endenabdeckung wie in Anspruch 1 oder 2 beansprucht, dadurch gekennzeichnet, daß die Unterseite Entwässerungsöffnungen (24) beabstandet entlang ihrer Länge aufweist.

4. Eine Endenabdeckung wie in Anspruch 3 beansprucht, dadurch gekennzeichnet, daß die Entwässerungsöffnungen (24) gegenüber der Basis (14) der Kanalglieder liegen.

5. Eine Endenabdeckung wie in einem der Ansprüche 1 bis 4 beansprucht, gekennzeichnet durch eine oder mehrere Projektionen (22) innerhalb des Kanals, die als Stopper für eine Paneele, auf die die Endenabdeckung angepaßt ist, dienen.

6. Eine Endenabdeckung wie in Anspruch 5 beansprucht, dadurch gekennzeichnet, daß die Projektionen (22) sich abwärts von der oberen Seitenwand (12) des Kanalglieds erstrecken.

7. Eine Endenabdeckung wie in Anspruch 6 beansprucht, dadurch gekennzeichnet, daß die Projektionen (22) sich in rechten Winkeln zu der oberen Seitenwand (12) des Kanalglieds erstrecken.

Revendications

1. Une coiffe d'extrémité (10) pour des panneaux en matière plastique à conduits de ventilation (11), qui comprend un organe de section de canal ayant une face (12) prévue supérieure et une face (16) prévue inférieure, la face supérieure ayant un joint d'étanchéité (20) co-extrudé, grâce à quoi, lorsque la coiffe d'extrémité est poussée sur un panneau en matière plastique, le joint d'étanchéité repose sur la surface du panneau pour limiter le passage d'eau au-delà du joint d'étanchéité,
caractérisée en ce que les faces supérieure et inférieure de l'organe de section de canal convergent sur au moins une partie de leur longueur et le joint d'étanchéité co-extrudé s'étend vers l'avant depuis un bord libre de la face supérieure de l'organe de section de canal.

2. Une coiffe d'extrémité telle que revendiquée à la revendication 1,
caractérisée en ce que la face inférieure de l'organe de section de canal a son bord libre (18) qui se recourbe en s'écartant de la face supérieure sur une partie de sa hauteur.

3. Une coiffe d'extrémité telle que revendiquée à la revendication 1 ou 2,
caractérisée en ce que la face inférieure inclut des orifices d'évacuation (24) espacés le long de sa longueur.

4. Une coiffe d'extrémité telle que revendiquée à la revendication 3,
caractérisée en ce que les orifices d'évacuation (24) sont adjacents à la base (14) de l'organe de canal.

5. Une coiffe d'extrémité telle que revendiquée à l'une quelconque des revendications 1 à 4,
caractérisée en ce qu'elle a, à l'intérieur du canal, une ou plusieurs saillies (22) agissant comme arrêts pour un panneau sur lequel la coiffe d'extrémité est montée.

6. Une coiffe d'extrémité telle que revendiquée à la revendication 5,
caractérisée en ce que les saillies (22) s'étendent vers le bas depuis la paroi de face supérieure (12) sur l'organe de canal.

7. Une coiffe d'extrémité telle que revendiquée à la revendication 6,
caractérisée en ce que les saillies (22) s'étendent à angle droit par rapport à la paroi de face supérieure (12) de l'organe de canal.

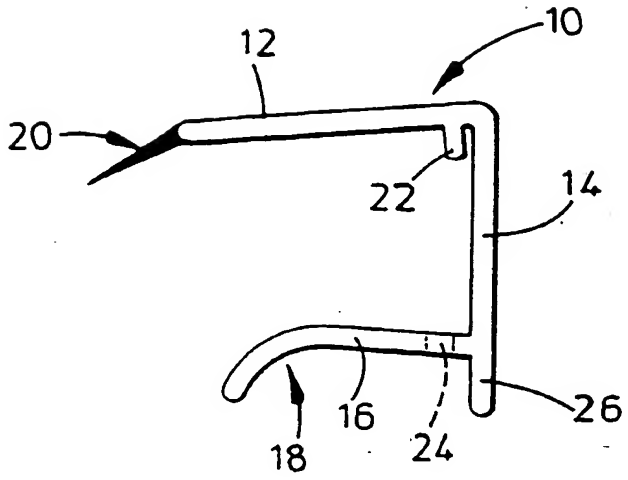

FIG. 1

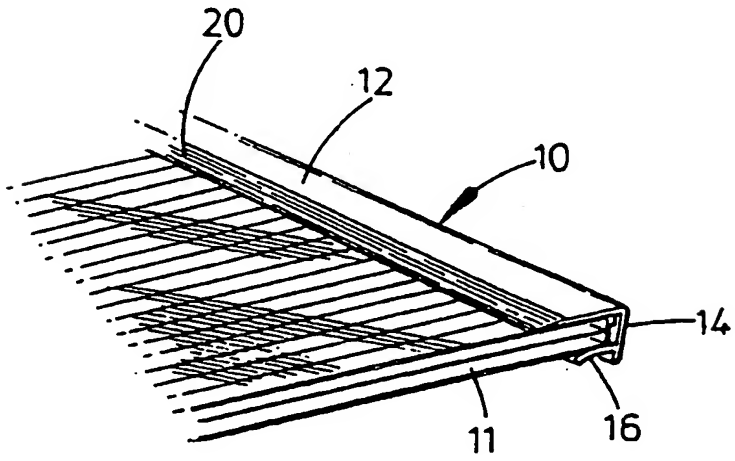

FIG. 2